AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 8, 10 and 11; and add new Claims 12-14 as follows.

LISTING OF CLAIMS

1. (currently amended) A fluid heating apparatus comprising:

a pump for circulating fluid through a fluid passage;

a heating device for heating the fluid;

[[a]] first temperature detecting means for detecting temperature ~~that changes in accordance with heat generation of the heating device; and~~ at a first position of the fluid passage which is located adjacent the heating device and is heated by the heating device;

[[a]] second temperature detecting means for detecting a temperature ~~of the fluid,~~ at a second position of the fluid passage which is spaced from the heating device on a down stream side of the heating device;

~~wherein the second temperature detecting means is disposed downstream from the heating device,~~

control means for controlling the heating device wherein when ~~it is determined that~~ a temperature difference between the temperature detected ~~temperatures detected~~ by the first temperature detecting means and the temperature detected by the second temperature detecting means exceeds a predetermined level, the control means stops heating operation of the heating device ~~is stopped~~.

2. (original) The fluid heating apparatus according to claim 1, wherein the first temperature detecting means detects a temperature of a pipe forming the fluid passage.

3. (original) The fluid heating apparatus according to claim 1, wherein the first temperature detecting means detects a temperature proximate to a pipe forming the fluid passage.

4. (original) The fluid heating apparatus according to claim 1, wherein the heating device heats a portion of a pipe, which forms the fluid passage, wherein the first temperature detecting means detects a temperature at a position proximate to a downstream portion of the heated portion of the pipe.

5. (original) The fluid heating apparatus according to claim 1, wherein the first temperature detecting means is disposed at a position proximate to an upper half of the heating device.

6. (original) The fluid heating apparatus according to claim 1, wherein a portion of the fluid passage that is heated by the heating device includes a curved portion, wherein the first temperature detecting means is disposed proximate to the curved portion.

7. (original) The fluid heating apparatus according to claim 6, wherein the first temperature detecting means is disposed proximate to an apex of the curved portion.

8. (currently amended) A heating apparatus for heating air comprising:

a pump for circulating fluid;

a heating device for heating the fluid;

a heat exchanger for performing heat exchange between the air and the fluid heated by the heating device, the heat exchanger being spaced from the heating device on a downstream side of the heating device;

a first sensor for detecting a temperature ~~that changes in accordance with heat generation of~~ of the fluid around the heating device; and

a second sensor for detecting a temperature of the fluid at a position which is spaced from the heating device on the downstream side of the heating device and which is proximate to a fluid inlet of the heat exchanger[[,]]; and

control means for controlling the heating device wherein when a temperature difference between the temperature detected ~~temperatures detected~~ by the first sensor and the temperature detected by the second sensor is greater than a predetermined level, the control means stops heating operation of the heating device ~~is stopped~~.

9. (original) The heating apparatus according to claim 8, further comprising:

a target temperature determining means for determining a target temperature of the fluid flowing into the heat exchanger; and

a controlling means for controlling operation of the heating device such that the detected temperature of the second sensor reaches the target temperature.

10. (currently amended) The heating apparatus according to claim 8, wherein the heating device heats a portion of [[the]] a fluid passage through which the fluid is circulated, wherein the first sensor detects a temperature proximate to a downstream portion of the heated portion of the fluid passage.

11. (currently amended) The heating apparatus according to claim 8, wherein a portion of [[the]] a fluid passage through which the fluid is circulated is heated by the heating device and has a curved portion and the first sensor detects a temperature proximate to an apex of the curved portion.

12. (new) The fluid heating apparatus according to claim 1, wherein the fluid heating apparatus is for a vehicular air conditioner.

13. (new) The fluid heating apparatus according to claim 1, wherein:

the first temperature detecting means indirectly detects the temperature of the fluid in the fluid passage through a wall of the fluid passage at the first position of the fluid passage; and

the second temperature detecting means indirectly detects the temperature of the fluid in the fluid passage through the wall of the fluid passage at the second position of the fluid passage.

14. (new) The heating apparatus according to claim 8, wherein:

the heating apparatus is for a vehicular air condition; and

the heat exchanger performs heat exchange between the fluid heated by the heating device and air to be blown into a passenger compartment of a vehicle.